

## **ABSTRACT**

1           A pluggable bi-directional transceiver with a single optical fiber comprises a sub-  
2 assembly module, a circuit board, a main frame, an upper cover, a lower cover, a tab-base  
3 and a tab, connected to a communication equipment. The sub-assembly module  
4 connected to a single optical fiber includes a WDM, which reflects or transmits a specific  
5 wavelength optical signal adapted to function in receiving and transmitting optical signal.  
6 The circuit board exchanges the signal of the sub-assembly module with the  
7 communication equipment. The main frame and the upper and lower covers are used to  
8 fix and protect elements. The tab and tab-base are used to fix the transceiver on the  
9 equipment or remove from it. The specifications of the transceiver follow the small form-  
10 factor pluggable transceiver multi-source agreement.